



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

*mt*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/004,827 01/09/98 PAGE

L S96-213

LM12/0309

THOMAS J MCFARLANE  
LUMEN INTELLECTUAL PROPERTY SERVICES  
426 LOWELL AVENUE  
PALO ALTO CA 94301

EXAMINER

LE.U

ART UNIT

PAPER NUMBER

2771

DATE MAILED:

03/09/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/004,827

Applicant(s)

Page

Examiner

Uyen Le

Group Art Unit  
2771



☒ Responsive to communication(s) filed on Dec 27, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-37 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☒ Claim(s) 1-7 and 9-15 is/are allowed.

☒ Claim(s) 8, 16, 17, 34, and 35 is/are rejected.

☒ Claim(s) 18-33, 36, 37 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Jan 9, 1998 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 9

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2771

## **DETAILED ACTION**

### ***Answers to Arguments***

1. Applicant's amendment to claims 1, 8 is acknowledged. Consequently, rejection to claims 1-8 under 35 U.S.C. 101 is withdrawn.
2. Applicant's arguments regarding claim 8 have been fully considered but they are not persuasive. Claim 8 merely reads on a recursive technique for node ranking well known in the art as admitted by applicant at page 3 of the specification. The prior art method of citation counting assigns a higher rank to a linked node if it has more backlinks compared to other nodes. Clearly, in a system of linked nodes, each backlink node in turn had been weighted in dependence upon the number of links in its backlink node. Note claim 8 does not require the backlink node to be assigned an importance other than the "weight" which in this case is interpreted as the number of nodes pointing to it.

### ***Drawings***

3. The drawings are objected to because they do not adequately illustrate the claimed subject matter. Note Figures 1-2 do not illustrate any claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2771

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 8, 16, 17, 34, 35 are rejected under 35 U.S.C. 102(a) as being anticipated by applicant's admitted prior art at pages 3 and 12.

Claim 8 merely reads on a recursive technique for node ranking well known in the art as admitted by applicant at page 3 of the specification. The prior art method of citation counting assigns a higher rank to a linked node if it has more backlinks compared to other nodes. Clearly, in a system of linked nodes, each backlink node in turn had been weighted in dependence upon the number of links in its backlink node. Note claim 8 does not require the backlink node to be assigned an importance other than the "weight" which in this case is interpreted as the number of nodes pointing to it.

Claim 16 merely reads on the fact that the prior art assigns a rank to a document based on the degree to which the search terms match the anchor descriptions in its backlink documents (see page 3, lines 13-18). Clearly, the backlink documents and the ranked documents are linked and the documents are processed according to their ranks.

Regarding claim 17, clearly the rank assigned to a document is dependent on the sum of the ranks of the one or more of the plurality of linked documents since the backlink documents are involved in ranking a document.

Art Unit: 2771

Claim 34 merely reads on the well known fact admitted by the applicant at page 12, line 19 that users typically jump to a different place while surfing the web. Furthermore, the claimed steps of assigning a rank to the linked document dependent on the number of times the linked document has been traversed is met when the prior art citation counting method assigns a rank to a document according to the number of documents pointing to it (see page 3, lines 20-22). Clearly, the step of processing linked documents according to their rank had been performed in the prior art method since the whole purpose of ranking documents is for orderly processing them according to their rank.

Claim 35 merely reads on the fact that a linked document is accessed and assigned a rank through another linked document. Clearly, in the process, the rank assigned is also dependent on the number of linked documents that have been traversed.

*Allowable Subject Matter*

5. Claims 1-7, 9-15 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not disclose or make obvious a computerized method for ranking documents represented as nodes including determining the rank of a node from a mathematical algorithm involving an initial N-dimensional vector wherein each component represents a probability that a user will arrive at a given node after a number of forward links and a NxN transition probability matrix wherein each element  $ij$  of the matrix represents a probability of moving from node  $i$  to node  $j$ ; or otherwise suggest its use together with all the limitations recited in claims 1 and 9.

Art Unit: 2771

All dependent claims 2-7, 10-15 being further limiting and definite are also allowable. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Claims 18-33, 36, 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosures.

Inoue et al (US 6,014,678) teach an apparatus for preparing a hypertext document of pieces of information having reference relationships with each other.

Art Unit: 2771

Craig Boyle "To link or not to link: an empirical comparison of Hypertext linking strategies", ACM 1992.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen Le whose telephone number is (703) 305-4134. The examiner can be reached on Monday through Thursday from 7:00am to 5:30pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703)305-9707.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington D.C. 20231

**or faxed to:** (703)308-9051, (for formal communications intended for entry)

**or:** (703)308-5403 (for informal or draft communications, please label

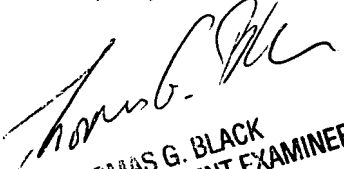
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone is (703)305-3900.

UL

03/01/00

  
THOMAS G. BLACK  
SUPERVISORY PATENT EXAMINER  
GROUP 2700